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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,847	02/13/2002	Fausto Armonti	Provvionato case 3A	8011
7590 02/08/2005 Flynn, Thiel, Boutell & Tanis, P.C. 2026 Rambling Road Kalamazoo, MI 49008-1699			EXAMINER CHANNAVAJJALA, LAKSHMI SARADA	
			ART UNIT 1615	PAPER NUMBER
DATE MAILED: 02/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/074,847</p>	<p>Applicant(s)</p> <p align="center">ARMONTI ET AL.</p>	
	<p>Examiner</p> <p align="center">Lakshmi S Channavajjala</p>	<p>Art Unit</p> <p align="center">1615</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28,29 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 28,29 and 31-38 is/are allowed.
- 6) ☒ Claim(s) 39 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Receipt of amendment and response dated 5-24-04 is acknowledged.

Claims 28, 29, 31-40 are pending. Claims 1-27 and 30 have been canceled.

The following rejection is a new rejection:

Claim Rejections - 35 USC § 103

1. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stray-Gundersen (US '723) in view of 5,292,538 to Paul et al (US '538) or '723 and '538 in view of US 4,592,909 to Winer et al (Winer).

Instant claims are directed to method of replenishing electrolyte levels lowered by passive transpiration/perspiration from heat stress comprising orally administering a composition comprising sodium ion, magnesium ion, potassium ion, zinc and manganese, which is useful for heat stress, including selective restoration of the potassium and magnesium ion, with the proviso that a carbohydrate source is not contained in the composition.

US '723 teaches a beverage composition comprising essential electrolytes, water, carbohydrates, antioxidants and other ingredients, as a replenishing drink to a person stressed by exercise, heat or illness (cols. 4-5, summary of the invention). US '723 teaches various amounts of sodium chloride, potassium salts such as potassium phosphate, calcium, iron, vitamins A, B, C, E etc (in cols. 8-9 & examples I to IV in cols. 12-14. The composition of US '723 contains sodium-230 mg/l, potassium-390 mg/l and calcium-120 mg/l. US '723 teaches 100 mg/l of Vitamin C, between 1 to 5 meq./liter magnesium ions (col. 9, lines 4-13) i.e., 24 mg to 120 mg/l and carbohydrate in the range of 1 to 2% for dextrose, by weight based on the total weight of the

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compositions (col. 9, lines 66-68 and col. 10, lines 1-11). US '723 further teaches preparing dry mixtures of the compositions (col. 12, lines 38-41).

US '723, discusses above, does not teach zinc, manganese, and carbohydrate free preparation.

US '538 teaches a sustained energy composition to combat the consequences of strenuous physical exercise, trauma, malnutrition etc., comprising a blend of carbohydrates, minerals, electrolytes, vitamins such as A, B complex, C, D and E, biotin, antioxidants etc. US '538 suggests adding bioavailable forms of minerals such as magnesium, zinc, manganese, boron etc., as amino acid chelates to facilitate sustained endurance and anabolism (col. 5, lines 5 through col. 6, lines 18, see table in col. 10 through col. 11). Therefore, it would have been obvious for a skilled artisan at the time of the instant invention to add manganese and zinc of US '538 in the nutritional composition of US '723, with an expectation to provide a complete nutrition with sustained energy and anabolism to a person stressed with physical exercise.

Alternatively, '909 teach a water based drink that is free of sugar, for replenishing electrolytes lost in athletes during activity and to reduce the severe heat stress (col. 1). '909 teach the addition of sodium, magnesium, calcium, potassium and phosphates in the composition (col. 2 and examples). '909 teaches that addition of sugar in the electrolyte drinks severely limits the gastric emptying due to high osmolarity and thus hinders the fluid replacement in athletes (col. 1-2). Therefore, it would have been obvious for a skilled artisan at the time of the instant invention to prepare the replenishing electrolyte drink of '723 containing zinc and manganese of '538, without adding any sugar because '909 suggests that reduced osmolarity, by preparing sugar free drinks, increases the gastric emptying time for the drink. With respect to the claimed heat stress,

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while the above references fail to teach the passive transpiration/perspiration from heat stress, as claimed, the references teach replenishing during physical activity, which also cause perspiration. Besides, applicants have not show that the replenishment for physical stress related perspiration does not include the same nutrients to replenish from heat stress. In the absence of showing any unexpected result, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the composition to replenish the loss of electrolytes due to perspiration. These amounts are different from that claimed in the instant invention.

Allowable Subject Matter

Claims 28, 29 and 31-38 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Instant claims recite a method of replenishing electrolyte levels lowered by a passive transpiration from heat stress comprising orally administering a composition comprising sodium, magnesium, manganese, zinc, potassium, rutin, beta-carotene, tocopherol, biotin and calcium, in specific amount and with the proviso that the composition does not contain a carbohydrate source. The prior art of record teaches electrolyte replenishing composition comprising the electrolyte salts, tocopherol and beta-carotene, calcium etc. However, the combination of the electrolytes with rutin and biotin, and further, in the absence of carbohydrate source is not suggested by prior art of record.

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Response to Arguments

Applicants' arguments dated 5-22-04 with respect to claims 28, 29 and 31-328 are moot in view of the allowability of claims. With respect to claims 39 and 40, examiner has applied a new rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

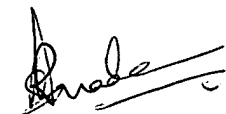
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lakshmi S Channavajjala
Examiner
Art Unit 1615
February 2, 2005



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